United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,286	06/28/2002	Jan Hellaker	7589.033.PCUS00	4430
28694 7590 09/14/2007 NOVAK DRUCE & QUIGG, LLP 1300 EYE STREET NW SUITE 1000 WEST TOWER WASHINGTON, DC 20005			EXAMINER	
			D AGOSTA, STEPHEN M	
			ART UNIT	PAPER NUMBER
	,		2617	
	,		, <u>-</u>	
		•	MAIL DATE	DELIVERY MODE
			09/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Application No.	Applicant(s)				
		10/064,286	HELLAKER, JAN				
		Examiner	Art Unit				
	·	Stephen M. D'Agosta	2617				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status			•				
1)⊠	Responsive to communication(s) filed on <u>05 Ju</u>	ine 2007	·				
· ·		action is non-final.	•				
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
,—	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims						
	Claim(s) 11-13 and 15-27 is/are pending in the	application	•				
4a) Of the above claim(s) is/are withdrawn from consideration.							
	5) Claim(s) is/are allowed.						
·	Claim(s) 11-13 and 15-27 is/are rejected.						
7)	Claim(s) is/are objected to						
8)	Claim(s) are subject to restriction and/o	r election requirement.					
Applicati	on Papers						
9)[]	The specification is objected to by the Examine	ır.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority (under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
	1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.							
See the attached detailed Office action for a list of the certified copies not received.							
Attachmer							
	1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date.						
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application Other:							

Art Unit: 2617

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 11-13, 15-27 have been considered but are most in view of the new ground(s) of rejection.

- > The USC 112 rejection is overcome by the amendment. Thank you.
- The amendment has modified the claims in such a way that a new (Final) rejection can be put forth (eg. the amendment appears to add in novel material from claim 14 but then removes certain other critical limitations).
- > A new rejection is found below

Specification.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

- Due to the recent amendment, the examiner believes a more apt title can be applied which more closely defines the focus of the inventive concept, eg. perhaps something to do with pre-emptive call processing during an emergency call between central and mobile/remote users (?).
- ➤ As currently written, "System and method for communication between a central station and remote objects", the title reflects very little about the main focus of the newly amended concept(s).

Art Unit: 2617

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 11 and 15-20, 23, 25 and 27 rejected under 35 U.S.C. 103(a) as being unpatentable over Timm et al. US 5,572,204 and further in view of Hattori et al. US 6,285,931 and Nojima US 5,933,080 and Uhlik et al. US 6,600,914.

As per claims 11 and 23 and 25, Timm teaches a system for communication between at least one central station (figure 1, #15) and at least one remote mobile or stationary object (figure 1, #10 is vehicle-mounted hardware) by means of transmitting and receiving means wherein said at least one object comprises a cellular phone module which provides a private subscription for private usage by a driver or operator of the object (figure 1, #22 shows cellular transceiver which reads on a cell phone) and a selectable service subscription for transmitting and managing at least an one of the services including roadside assistance and emergency assistance service by means of the at least one central station (abstract teaches both and C1, L60 to C2, L30) but is silent on said emergency assistance service preempts ongoing phone calls such that ongoing phone calls are interrupted in deference thereto remote status information, malfunction, and diagnostics and maintenance are monitored and resolving conflict with simultaneous execution of a plurality of services.

Hattori teaches a vehicle information system that transmits vehicle diagnosis information to a management station (abstract, figure 1, figure 4 shows areas monitored #41-48, figures 7-10 and C2, L15 to C3, L46).

Nojima teaches an emergency calling system that <u>prioritizes</u> who is to be contacted based on certain roadway conditions and/or accident (see abstract, figures 1 and 3). Hence, Timm and Hattori's systems are performing routine maintenance

Art Unit: 2617

monitoring, they would be interrupted if a crash occurs (as taught by Nojima's call database prioritization).

Uhlik teaches providing a communications channel to a user if it is determined that said user is making an emergency call whereby a call in progress is disconnected (eg. preempted) in order to provide a communications circuit to said emergency call (Abstract).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Timm, such that remote status information, malfunction, and diagnostics and maintenance are monitored with conflict resolution for simultaneous execution of a plurality of services, ongoing calls are preempted for an emergency call, to provide means for insuring that an emergency call is always given priority and a communications channel, to provide means for obtaining technical vehicle status data from the automobile which can be passed to the central station to assist them in evaluating the car's operation (eg. doesn't work because there is there is something wrong with the Alternator, it's out of gas, the battery has died, etc.).

With further regard to claims 25 and 27, Uhlik teaches preempting calls based on priority (eg. emergency), which reads on the claim, eg. wherein a conflict concerning simultaneous execution of several services during service subscription is handled automatically by assigning and affecting a priority to each service and deactivating any services with a minor priority than the service with a first priority.

As per **claim 15**, the comboteach the system according to claim 11, wherein the at least one central station is a customer service center and the at least one remote object (20, 24, 25) is a vehicle, a boat, a plane or a remote facility or plant (Timm teaches a "response center" figure 1, #15 which reads on the claim and a car/vehicle, C1, L15-21. One skilled can adapt this system to a boat, plane or remote facility/plant).

Art Unit: 2617

As per claim 16, the combo teach the system according to claim 11, wherein the service subscription is activated by the central station or the remote object (figure 1 #15 shows a response center that must inherently activate a subscription so as to know that a certain car/vehicle is to be monitored and C3, L60-67 teaches checking on the user's account. General Motors' ON STAR is a subscription-based service that is well known in the art (see <u>Lumelsky</u>, referenced but not cited — "General Motors Corporation introduced its OnStar system for the 1997 Cadillac model. By linking the car's cellular phone to a global positioning satellite, OnStar can locate and send help to a stranded or disabled motorist; including sending medical assistance as soon as it detects that the car's air bag has been deployed. OnStar's service center operator receives coordinates of an automobile equipped with the OnStar system and could navigate its user, over the cellular phone, with continuous directions").

As per claim 17, the combo teach the system according to claim 11, wherein a satellite communication is provided for activation when cellular communication is not available (Timm teaches cellular communications which typically is terrestrial-based but a base station can be a space-based satellite and would be used if/when a terrestrial BTS is not available and that specific area is covered by a satellite, see C9, L3-13 too. The examiner notes that *Razavi, referenced but not cited*, teaches multiple communications means, see figure 1 #26-29 and hence one skilled would also use satellite communications).

As per claim 18, the combo teaches the system according to claim 11, wherein the at least one object comprises a controller module for bi-directional communication with a data bus or network manager which is connected with an internal data bus or network of the object (figure 1, #20 teaches a system controller and internal data bus connections to other components such as the cell transceiver, GPS transceiver, message center, cellular handset, etc.).

Art Unit: 2617

As per claim 19, the combo teach the system according to claim 18, wherein the at least one object comprises at least one of a user interface manager (C3, L1-15 teaches user interaction with the system, eq. an interface), a satellite communication module (Timm teaches cellular communications which typically is terrestrial-based but a base station can be a space-based satellite and would be used if/when a terrestrial BTS is not available and that specific area is covered by a satellite, see C9, L3-13 too. The examiner notes that *Razavi, referenced but not cited*, teaches multiple communications means, see figure 1 #26-29 and hence one skilled would also use satellite communications), a GPS controller (figure 1, #21 teaches GPS controller/receiver) and at least one emergency sensor (207) for automatically detecting accidents, emergency or malfunctions of the object (C9, L3-13 – "Although global" position system (GPS) and cellular technologies have been described in the preferred embodiment, other positioning and communication technologies could be used in the present invention. For example, position information could be obtained from the Loran-C system or other navigation systems. A communication system such as the personal communication service (PCS) could also be used. In addition to activating the vehicle emergency message system from any manual switch assembly, service requests could also be initiated automatically, such as in response to deployment of an airbag").

As per **claim 20**, the combo teaches the system according to claim 11, wherein a transition from private subscription to service subscription can be initiated by a key press of the operator and/or automatically by means of at least one sensor (207) for detecting accidents, emergency or malfunctions of the object or by means of a further sensor for detecting an air-bag deployment (figure 1 shows cellular transceiver and handset which can be used for private subscription, figure 1, #22/#25 while C9, L3-13 teaches automatic service request based on an event such as an airbag deployment).

Art Unit: 2617

<u>Claims 12-13 and 21-22</u> rejected under 35 U.S.C. 103(a) as being unpatentable over Timm and Hattori and further in view of Nojima/Uhlik.

As per claim 12-13, Timm teaches claim 11 but is silent on wherein the service subscription transmission preempt private usage transmissions AND/OR wherein each service has a priority value assigned thereto for use in automatic resolution of conflict AND/OR emergency assistance has highest priority so that on-going calls are interrupted in deference thereto and wherein means are provided for automatically resolving conflict associated with simultaneous execution of a plurality of said services.

The examiner notes that if only one communications means exists, then one skilled would need to ensure that service data is prioritized and is based on priority since simultaneous communications is not possible. Conversely, if multiple communication means exist, then service data can be sent via simultaneously and one does not have to prioritize data. The examiner notes take Official Notice that this "concept" is similar to Quality of Service applications which are well known in the art and provide more bandwidth to high(er) priority users/applications as needed and will preempt any low(er) priority users/traffic if bandwidth becomes constrained. Furthermore, Uhlik teaches providing a communications channel to a user if it is determined that said user is making an emergency call whereby a call in progress is disconnected (eg. preempted) in order to provide a communications circuit to said emergency call (Abstract).

Nojima teaches an emergency calling system that <u>prioritizes</u> who is to be contacted based on certain roadway conditions and/or accident (see abstract, figures 1 and 3). Hence, Timm and Hattori's systems are performing routine maintenance monitoring, they would be interrupted if a crash occurs (as taught by Nojima's call database prioritization).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the combo, such that wherein a conflict concerning simultaneous execution of several services during service subscription is handled automatically by assigning and affecting a priority to each service and deactivating any services with a minor priority than the service with a first priority, to provide means for

Art Unit: 2617

transmitting service data via one data path if/when two-or-more service events occur concurrently.

As per claim 21, Timm teaches a system for communication between at least one central station (figure 1, #15) and at least one remote mobile or stationary object (figure 1, #10 is vehicle-mounted hardware) by means of transmitting and receiving means wherein said at least one object comprises a cellular phone module which provides a private subscription for private usage by a driver or operator of the object (figure 1, #22 shows cellular transceiver which reads on a cell phone) and a selectable service subscription for transmitting and managing at least one of the services including roadside assistance and emergency by means of the at least one central station (abstract teaches both and C1, L60 to C2, L30) and Timm teaches Power Up mode, Wait Mode and Activation mode (see figure 2) as well as automatic periodic call-in (#39) and Wake-up Control (#43) which read on the claim regarding "...sleep mode (S), a standby mode (W) and a first service execution mode (T1), wherein the sleep mode is terminated when a wake up timer elapsed and the standby mode is activated in which the object waits for an incoming message from the service center via a cellular and/or a satellite communication for a predetermined period of time, after which the sleep mode is again activated if no message has been received or a requested service is activated if a related message has been received and decoded..."

but is silent on remote status information, malfunction, and diagnostics and maintenance are monitored AND wherein a conflict concerning simultaneous execution of several services during service subscription is handled automatically by assigning and affecting a priority to each service and deactivating any services with a minor priority than the service with first priority.

Hattori teaches a vehicle information system that transmits vehicle diagnosis information to a management station (abstract, figure 1, figure 4 shows areas monitored #41-48, figures 7-10 and C2, L15 to C3, L46).

The examiner notes that if only one communications means exists, then one skilled would need to ensure that service data is prioritized and is based on priority

Art Unit: 2617

since simultaneous communications is not possible. Conversely, if multiple communication means exist, then service data can be sent via simultaneously and one does not have to prioritize data.

Nojima teaches an emergency calling system that <u>prioritizes</u> who is to be contacted based on certain roadway conditions and/or accident (see abstract, figures 1 and 3). Hence, Timm and Hattori's systems are performing routine maintenance monitoring, they would be interrupted if a crash occurs (as taught by Nojima's call database prioritization).

Uhlik teaches providing a communications channel to a user if it is determined that said user is making an emergency call whereby a call in progress is disconnected (eg. preempted) in order to provide a communications circuit to said emergency call (Abstract).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the combo, such that ongoing calls are preempted for an emergency call, to provide means for insuring that an emergency call is always given priority and a communications channel. wherein a conflict concerning simultaneous execution of several services during service subscription is handled automatically by assigning and affecting a priority to each service and deactivating any services with a minor priority than the service with a first priority, to provide quality of service whereby higher priority messages preempt lower priority messages as required.

As per claim 22, the combo teach the method according to claim 21 wherein the at least one object has a phone mode (figure 1 shows cellular handset/transceiver #22/#25 but is silent on a second execution mode (T2), wherein the phone mode is interrupted when a service is requested, until a cellular and/or a satellite communication between the object and the central station has been established and the service has been executed.

Nojima teaches an emergency calling system that <u>prioritizes</u> who is to be contacted based on certain roadway conditions and/or accident (see abstract, figures 1 and 3). Hence, Timm and Hattori's systems are performing routine maintenance

Art Unit: 2617

monitoring, they would be interrupted if a crash occurs (as taught by Nojima's call database prioritization).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to <u>modify the combo</u>, such that there is a second execution mode, wherein the phone mode is interrupted when a service is requested, until a cellular and/or a satellite communication between the object and the central station has been established and the service has been executed, to provide means for connecting a service-based call to the central station even if the communication means is being used by the driver, to ensure the service-based call gets through to the central station.

<u>Claims 24 and 26</u> rejected under 35 U.S.C. 103(a) as being unpatentable over Timm/Nojima/Uhlik and further in view of Hattori et al. US 6,285,931.

As per claims 24 and 26, the combo teaches claim 11/23, but is silent on wherein said selectable service subscription is further for transmitting and managing services including at least one of remote status information, malfunction information, diagnostics and maintenance information, and technical information.

Hattori teaches a vehicle information system that transmits vehicle diagnosis information to a management station (abstract, figure 1, figure 4 shows areas monitored #41-48, figures 7-10 and C2, L15 to C3, L46).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the combo, such that selectable services transmit/manage at least one of remote status information, malfunction, and diagnostics and maintenance are monitored with conflict resolution for simultaneous execution of a plurality of services, to provide means for obtaining technical vehicle status data from the automobile which can be passed to the central station to assist them in evaluating the car's operation (eg. doesn't work because there is there is something wrong with the Alternator, it's out of gas, the battery has died, etc.).

Art Unit: 2617

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 571-272-7862. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

STEVE M. D'AGOSTA PRIMARY EXAMINER 9-4-07